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Sent: Fri 12/7/2012 2:35:58 PM
Subject: Fw: Greenwire - Pavillion driller blasts EPA contamination findings

FYI

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HYDRAULIC FRACTURING:

Pavillion driller blasts EPA contamination findings

Ellen M. Gilmer, E&E reporter

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Encana Corp., fighting accusations that its gas wells contaminated drinking water in Pavillion, Wyo., is calling on U.S. EPA to withdraw a draft report that linked hydraulic fracturing in Wyoming to groundwater contamination there.

Encana interpretation of test well results

Encana compares U.S. EPA and U.S. Geological Survey results from a monitoring well in Wyoming and speculates on why certain compounds were detected.

Compound Detected by USGS Detected by EPA Comments

Methane Yes Yes Main component of natural gas

Propane Yes Yes Component of natural gas

Ethane Yes Yes Component of natural gas

Benzene No No --

Toluene No No --

Xylenes No No --

Acetone No Yes Lab contaminant

4-Methyl-2-pentanone No Yes Lab contaminant

Benzoic acid Yes Yes Naturally occurring; leaches from PVC plastics

Isopropyl alcohol No Yes Lab contaminant

Phenol Yes Yes Naturally occurring; leaches from PVC plastics

Diethylene glycol No Yes Likely a false positive; component of plastics

Triethylene glycol No Yes Likely a false positive; component of plastics
Tetraethylene glycol No Yes Likely a false positive; component of plastics
2-Butoxyethanol No Yes Likely a lab error; component of metal cutting oil
Nonylphenol No Yes Found in equipment cleaners or lab contaminant
Octylphenol No Yes Found in equipment cleaners or lab contaminant
Chart courtesy of Encana.

Encana, the main driller in the Pavillion field, said in a press call yesterday that any contaminants detected in EPA's monitoring wells were either naturally occurring or were introduced by the agency during "sloppy" well construction or lab testing.

EPA drilled two monitoring wells after homeowners near the oil field complained about foul water they began noticing in 2005. In a draft report released a year ago, the researchers said they had found fluid from fracking not in drinking water, but in deep groundwater.

Encana's David Stewart, who handles environment, health and safety issues in Wyoming, said EPA's analysis of deep groundwater was misguided, and "EPA should withdraw the draft report." He said the agency was assuming natural gas development was the culprit instead of considering naturally occurring contaminants and other sources.

The criticism is similar to that voiced recently by the American Petroleum Institute (EnergyWire, Oct. 19).

The U.S. Geological Survey used EPA's wells to conduct its own study, which replicated some of EPA's results but not others. And it threw out data from one of the monitoring wells due to low flow rates. That well had shown the presence of benzene at 49 times EPA's maximum contaminant level.

Some compounds, including three types of glycols, were detected by EPA but not USGS in the other well. Encana said the EPA results were likely false positives. EPA has defended its testing methods and reiterated today that USGS's data is "generally consistent" with its own findings released in the draft report. The agency declined to comment this week on Encana's allegations of faulty testing methods.

Both federal agencies detected methane, propane and ethane in the deep groundwater. All are components of natural gas that Encana says are naturally occurring. They also both detected phenol and benzoic acid. The company contends that those also occur naturally and leach from polyvinyl chloride plastics used by EPA to construct the monitoring wells.

"The important point is that these are naturally occurring and have existed in these zones for eons. Encana didn't put them there; nature did," company spokesman Doug Hock said in an email.

Stewart acknowledged that robust base-line water quality information would have headed off many of the discrepancies over whether compounds are natural or drilling-related. Encana now has a standard practice of examining base-line data for groundwater in all oil and gas plays and new wells, he said.

Reporter Mike Soraghan contributed
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